PUB-NO: DE019721929C1

DOCUMENT-IDENTIFIER: DE 19721929 C1

TITLE: Thin film igniter for pyrotechnic material

especially of

airbag

PUBN-DATE: January 28, 1999

INVENTOR-INFORMATION:

NAME COUNTRY

WEIS, UWE DIPL ING DE

ASSIGNEE-INFORMATION:

NAME COUNTRY

WEIS UWE DIPL ING DE

APPL-NO: DE19721929

APPL-DATE: May 26, 1997

PRIORITY-DATA: DE19721929A (May 26, 1997)

INT-CL (IPC): F42C019/12, F42B003/12 , F42B003/13 , F42B003/195

EUR-CL (EPC): F42B003/13; F42B003/195

ABSTRACT:

:

CHG DATE=19990905 STATUS=C>A thin film igniter element for pyrotechnic

active materials consists of a substrate (4) bearing two electric contacts (1)

connected together by a chemically and thermally active fuse bridge layer (2)

which consists of a hydrided hafnium and/or titanium layer and which is

preferably initiated by a plasma discharge. Preferably, the fuse bridge layer

(2) consists of hafnium-free TiHx (x = 0.5 to 2.0), titanium-free HfHx (x = 0.5)

0.025 to 2.0) or a hydrided hafnium-titanium mixture. Also claimed is

production of the above thin film igniter element by (a) depositing and

structuring a hafnium and/or titanium layer in accordance with the geometry of

the fuse bridge layer (2) and the contacts (1); and (b) hydriding the layer

preferably at about 350 deg C.